

A Case Study

Implement DevOps & Ensure Delivery Quality



Client Profile

The client is a 100+ year old public, deemed, research university for higher education and research in science, engineering, design, and management. It is ranked second in the world in terms of citations per faculty and is one of the top research universities in Asia.

The client (the university) has several internal systems, softwares and platforms in place to help its students, faculty, vendors, visitors etc., with various functions.

The university partnered with IMSS to help revamp its solutions, integrate disparate solutions to work together seamlessly and develop new solutions on various platforms where necessary.

Summary

This project is to ease the requirement management and in turn optimize the schedule and quality of deliveries.

IMSS identified and integrated various DevOps tools and practices to efficiently manage the projects.

By the end of the project, IMSS made it easier for the client and their development teams to streamline the requirement receival process, tracking and project management for better resource management, inculcate better project discipline using DevOps tools and traceability from requirement to closure.

Opportunity

IMSS has been engaged in maintenance of multiple applications which are catering to core academic functions of IISc. IMSS team has been delivering enhancements and support on these applications.

Generally, the requirements are received from multiple stakeholders through emails, meetings and verbal communications.

Often, it becomes difficult to manage the requirements effectively, which in turn affecting the delivery schedule and quality of delivery.



Solution

IMSS integrated various DevOps tools and processes to achieve the below.

- Requirements should be captured at a central location and team members for performing their respective activities.
- Processes to be defined for addressing the conflict between support and development activities.
- Process Discipline like Daily
 Stand-Up, Review Process, Periodic
 project Reviews
- Building of test cases for the requirements.
- Time tracking for better resource management
- Source Code Management
- Traceability from Requirement to closure.
- Automation of builds and deployment.

Tools and Practices

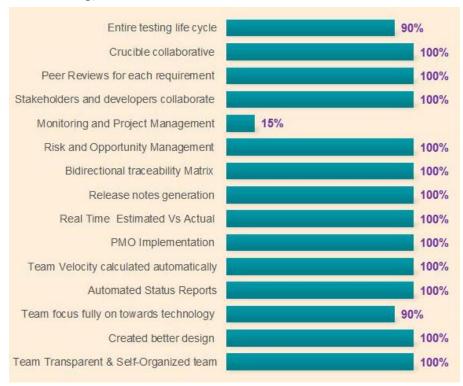
- PLAN & CODING:
 JIRA, AIO Time Sheet, Xray Test
 Management, GitLab
- QUALITY MANAGEMENT:
 Maven, MS Build, Nunit, Xray Test
 Management
- DEPLOYMENT MANAGEMENT:
 Ansible, Puppet
- MONITORING:
 JIRA Dashboards, Auto Status mails team, Auto Build Mails, Auto Unit test mails, Auto release notes.
- INTEGRATION MANAGEMENT: Bamboo, Jenkins

Results

- 90% shift in team focus shift from operations to technology.
- 100% automation of weekly / monthly report submission to respective reporting managers.
- 100% automation of team velocity calculation burnt story point w.r.t sprint and automate reporting.
- 100% automation of creating the build upon code check-in to source control and automatically perform unit-tests and produce results.
- 100% auto-generation of release notes w.r.t. product deployment.
- 100% automation of bi-directional traceability matrix management.
- 90% automation of test life cycle management - test plan, design, execution and reporting.
- 85% reduction in manual monitoring and project management.



Methodology





Restrictions on Disclosure

The copyright in this work is vested in Integra Micro Software Services (P) Ltd., (hereafter referred to as IMSS) and is issued in confidence for the purpose for which it is supplied. This work must not be reproduced in whole or in part or used for tendering or manufacturing purposes, except under an agreement or with the consent in writing of IMSS., and then only on the condition that this notice is included in any such reproduction. No information as to the contents or the subject matter of this document or any part thereof arising directly or indirectly there from shall be given orally, in writing, in any tangible or intangible manner, or communicated in any manner whatsoever to any third party, be it an individual, firm, corporation or employee thereof, without the prior consent in writing of IMSS.

Integra Micro Software Services (P) Ltd. #4, Bellary Road, 12th km, Jakkur, Bangalore – 560 064, Karnataka, India

Phone: +91-80-28565801 Fax: +91-80-28565800 Email: business@imss.work

© 2020 Integra Micro Software Services Pvt. Ltd. All Rights Reserved.

www.imss.work

IMSS | Digital | Automate | Accelerate | Assure

About IMSS

IMSS is a reliable provider of software services in Digital Automation, Application Development, Consulting & Outsourcing.

The insights and quality services we deliver help build trust and confidence in our customers. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people and for our clients.

This material has been prepared for general informational purposes specifically for you and is not intended for wide circulation. Information about how IMSS stores and uses your data and a description of the rights individuals have under different data protection legislations world-wide is available via www.imss.work/privacy.

For more information about our organization, please visit www.imss.work.

© 2020 Integra Micro Software Services Pvt. Ltd. All Rights Reserved.

www.imss.work